

Automated UNM Retro Degree Printing Process Using Oracle APEX

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### **Retro Degree Online Process**

- Retro memo is the process used to have a student's degree record reviewed for awarding after the mass awarding process for a semester has passed.
- It is up to the College, Department or Branch whether they will process retros.
- If a College, Department or Branch choices to submit retros starting Monday, March 22, 2021 the process will move to an online process

### **Previous Process**

- College, Department or Branch sends a Dean signed paper retro memo to Records or Registration using <u>dept\_update-L@list.unm.edu</u>.
- All communication happens through email using a paper retro memo that has to be included in the communication

### **New Process**

### Updates

- All communication will happen through email.
- The Online Retro Site will be used to initiate a retro.
- There will be a workflow that the retro will go through for the review process

### **Email Template for Workflow**

\*Approval Template when Advisor request has been approved: Your retro request has been approved for processing

\*\*Denial Template when Advisor request has been denied: Your retro request has been denied please click on the below link to revise and resubmit. (Include APEX link)

\*\*\*Records/Registration Template: There is a retro ready for review please click on below link. (Include APEX link.) email sent to <u>dept\_update-</u> <u>L@list.unm.edu</u>

\*\*\*\* Records/Registration Template: There is a retro needing to go to A&R for review. (Include APEX link.) email sent to <u>unmreg@unm.edu and</u> <u>degrees@.unm.edu</u>

### Flow Chart for Updated Retro Process



# Technical difference Degree printing and Retro Degree printing process

### Normal Degree printing process

- There is no approval/disapproval process for Registrar's office.
- There is no degrees to hold for A&R review.
- End date is needed that serves as an expiry date for Advisors and Dean.
- Admin column should be null with the access table. There is no workflow for admins.
- There is no notification when a student degree is approved/disapproved.
- No progress bar to check student's progress during approval.

### **Retro Degree printing process**

- There is approval/disapproval process for Registrar's office.
- Added Options to move degree to A&R review.
- There is no end/expiration date needed.
- Workflow for admins is included that serves as the final step in approving the retro degree process.
- There is bell and email notification added when a student degree is approved/disapproved
- Added progress bar

# Introducing Oracle APEX

- A low code platform and Rapid Application Development (RAD) tool
- APEX is pure SQL driven and an automatic HTML-generator
- Supports Faceted search and REST(Representational state transfer) services
- Build secure web pages using authentication and authorization schemes
- Provide developers to define client side behavior declaratively using dynamic actions and AJAX callback
- Highly customizable charting capabilities
- Easily extensible via plug-ins



# **Oracle APEX Architecture**



### **Dynamic Actions Demo**



### AJAX Call Back Demo



### **REST APIs Demo**



### **Retro Degree Application Demo**



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Cancel

Step 4: Click on "Add button" on the bottom left. The student will be added as a Retro Degree

Con 2	*
Con 3	\$
Minor 1	
Minor 2	
Grad Status	
Advisor Comments	(include Distinctions and Departmental Honors above)

Step 5: There is a validation check in place where if you try to add the same student again with same degree and major information, then an error saying 'student with same major exist'

error has occurred o student with same major exited	st 🚺	×					
Add Student Retro Degree Form							
		Print Parl 🔂					
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	Grad Period						
	Catalog Year *						
	UNM ID *						
	Name						
	First Name						
	last name						

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Note: The only way to add a student twice is to change the degree or major information



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Step 6: After adding the student retro, in order to view them Click on Home button.

 Select campus, college and major information and hit on 'Select Retro' button



Step 7: After clicking on 'Select Retro', if you have the right bar role setup as an advisor of the college, you will be able to view the retro degree of students added under 'Retro Degree List' section

Note: If the 'Retro Degree List' section is empty, you either haven't added any students or you don't have right bar roles set up for your NetID



Step 7: After clicking on 'Select Retro', if you have the right bar role setup as an advisor of the college, you will be able to view the retro degree of students added under 'Retro Degree List' section

Note: If the 'Retro Degree List' section is empty, you either haven't added any students or you don't have right bar roles set up for your NetID

Step 8: After adding a retro degree for a student, if you still need to edit any information of a student, click on 'Edit'



Step 9: In the "Edit Retro Degree List Form", You will be able to edit any information of the student.



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Step 10: Click on 'Apply Changes' after making changes to any existing student information

Note: You will see the column 'Edited' will be updated to 'Y'



Step 9: In the "Edit Retro Degree List Form", You will be able to edit any information of the student.

Step 10: Click on 'Apply Changes' after making changes to any existing student information

Note: You will see the column 'Edited' will be updated to 'Y'

Step 11: If you add a student record who is not a retro, you can click on 'Delete' under the "Edit Retro Degree List Form"

icial Degree Pri	nt			Log Out
	<b>NEW</b>			
	Registrar Comments		×	
	Registrar Admin Comments	k		
	Dean Comments	h		₽
	Cancel			Delete Apply Changes

Step 12: Clicking on 'Delete' will mark the column 'Removed' as 'Y' and the particular student never be a part of the workflow even after 'Advisor' reviews and approves the retro



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Step 13: The Advisor reviews the Retro Degree List and submit the retro by clicking on 'Submit' button. The 'Removed' retro degrees won't be in the submitted students list.

Note: The Advisor needs to submit the students and make sure the students added are in the 'submitted students' section . The students under the section were the ones that are ready for Dean's review.



Step 14: If there are more than one advisors in a department and each wants to review the retros individually then they could make use of 'Hold Retro section' by clicking on 'Hold Retro' button.



#### **Dean Roles**

Step 1: Once the Dean logins, they will be redirected to be home page where they will be asked to enter campus, college and major. After selections are made, click on 'Select Retro' button



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Step 1: Once the Dean logins, they will be redirected to the home page where they will be asked to enter campus, college and major. After selections are made, click on 'Select Retro' button

Step 2: The next screen will be the list of student retro degrees who were added and reviewed by Advisors and waiting for Dean's approval. The Dean can either approve/disapprove a student's retro

Note: If disapproved then the student will propagate back to advisor queue.



#### **Dean Roles**

Step 3: Once the dean clicks on 'Approve' button, the student will be moved to 'Approved List' section where the retros are ready for 'Registrar Coordinators' to review.

Note: If Dean wants to disapprove any retros after they approved a retro, they can always disapprove a retro from the 'Approved List' section.



Step 1: Once the Registrar Coordinator logins, they will be redirected to the home page where they will be asked to enter campus, college and major. After selections are made, click on 'Select Retro' button

Note: The Registrar Coordinator and Registrar admins will have all colleges on the filters unlike Advisors and Deans who only going to have access to colleges based on the bar roles



#### Step 2:

The next screen will be the list of student retro degrees who were added and reviewed by both Advisors and Deans then waiting for Registrar Coordinator approval. The Registrar Coordinator can either approve/ hold for A&R review/ disapprove a student's retro

Note: If Registrar Coordinator disapproves a retro, then the student is moved to advisor's queue where the process begins all over from the start



Step 3: Once the Registrar Coordinator clicks on 'Approve' button, the student will be moved to 'Retro Degree List – Registrar admin' section where the retros are ready for 'Registrar Admins' to review

Note: The admin can either approve/disapprove the retro degree. If disapproved, then the retro will be propagated back to Registrar Coordinator's queue



Step 4: Once the Registrar Admin clicks on 'Approve' button, the student will be moved to 'Approved Students: Registrar Admins' section where the retros are ready for 'Registrar Coordinator' for final review

Step 5: The Registrar Coordinator then chose to unAward the student by clicking on 'unaward' button where the student retro will be moved to his own queue then to the advisors



Step 6: Once the Registrar coordinator completes the final approval process, they would be able to print/view the complete list of retros added by clicking on "ViewAll" button



Step 6: Once the Registrar coordinator completes the final approval process, they would be able to print/view the complete list of retros for all colleges by clicking on "View All" button

Note: Additionally, Registrar office able to view the progress of a particular student via progress bar that gets updated dynamically by clicking on 'Retro Degree Report' and then selecting the campus and college for whom they want to check the progress of the retro degrees.



## Summary and Conclusion

- This presentation reviewed on how we completely changed the complicated process that was based on pen-paper for a single retro degree of a UNM student to a complete automated process where a retro degree can be added/removed with a single click using Oracle APEX
- In addition, we also learned some features of Oracle APEX in action



# Thank You! Questions?

DIVISION OF ENROLLMENT MANAGEMENT

### Thank you for attending the session!

- Please remember to **complete the survey!**
- If you have **questions for the presenter**, please email the Enrollment Management Reporting Team at emrt@unm.edu